

Analysis of Intention to Transact Use Marketplace and Social Media Reviewed from Technology Accepted Model and Perceived Risk on College Students in Jember

Ihrom Caesar Ananta Putra

STIE Mandala

Jl. Sumatra No. 118-120

Jember, East Java, Indonesia

(+62331-334324)

ihrom@stie-mandala.ac.id

ABSTRACT

This study aims to examine the influence of perceived usefulness, perceived ease of use, perceived risk and attitude toward use on intention to transact on 2 e-commerce models, marketplace and social media. This research is a descriptive and comparative study with 140 research samples consisting of 70 samples in each e-commerce model obtained from students in Jember who are experienced in using e-commerce. The data analysis method used is Partial Least Square (PLS). The results showed that: (a) Perceived ease of use has an influence on perceived usefulness on Marketplace and Social Media; (b) Perceived usefulness has an influence on attitude toward use on Marketplace and Social Media; (c) Perceived ease of use has an influence on attitude toward use on Marketplace and Social Media; (d) Perceived usefulness has an influence on intention to transact on Marketplace and Social Media; (e) Attitude toward use has an influence on intention to transact on Marketplace and Social Media; (f) Perceived Risk has no influence on intention to transact on Marketplace and Social Media.

Keywords: technology accepted model, perceived risk, e-commerce.

1. INTRODUCTION

Internet in Indonesia, seen from the number of users, always increases from year to year, according to the most recent data from APJII (2020). In 2014 internet users in Indonesia still opened 88 million people, in 2016 it increased by 132.7 million people. In 2017 it reached 143.26 and in 2018 it increased by 171.17 million people. Meanwhile, in 2019 internet users in Indonesia opened 196.71 million people or 73.7% of the total population of Indonesia who opened 266.71 million people. Even seen from the value of e-commerce transactions in 2020 it reached 266,300 million rupiah. Internet users in Indonesia based on the highest age range are in the age group 15-19 years and 20-24 years. The age range is the age of young people. In terms of work and/or education, the average age is college students. Meanwhile, if viewed based on the level of education, internet users with "currently studying" education reached 92.6%, is one of the highest.

Jember is one of the areas with the highest number of universities in East Java with a total of 71,891 students (PDDIKTI, 2019). The "mahasiswajember" instagram account is one of the largest online community forums in Jember with more than 26,000 followers. The account is an efficient means of communication and exchange of information among students in Jember, especially the internet user community. Therefore, the "mahasiswajember" account as one of the student online community accounts in Jember is used as a forum to collect and filter information.

This study focuses on knowing the interest in transacting using marketplace and social media on students in Jember. research related to e-commerce seen from the point of view of the TAM theory (technology accepted model) there are still inconsistent results. Therefore, this paper focuses on discussing measuring interest in transactions using the marketplace and social media in terms of the technology accepted model and perceived risk.

1. LITERATURE REVIEW

2.1. Technology Accepted Model (TAM)

This study uses the Technology Accepted Model (TAM) as a grand theory in predicting and analyzing intentions to use e-commerce. Davis (1989) developed TAM to explain user perceptions of an information system and determine their behavior in the use of a technology or information system, including perceived usefulness and perceived ease of use. In this model, perceived usefulness and perceived ease of use have an influence on attitudes and behavior, in this study the intention to transact. The information that is assessed on the usability and ease of use factor will affect the attitudes and interests of the tendency to continue to use the system or information technology, but in this study there are risk factors that can influence behavior.

2.2. Perceived Risk

Perceived risk factor is one of the most important barriers that consumers consider when making a decision to make an online purchase. This risk is related to how a consumer has the confidence to involve technology in various jobs carried out by consumers, including in terms of finding the products needed and making purchases of these products (McCole et al, 2010).

The form of consumer concern when providing personal information to online shopping sites and the possibility of being misused by irresponsible parties (Ganguly et al, 2009). Kim et al (2008) in their research stated that the risk factor perceived by consumers is consumer beliefs about the potential negative outcome of uncertainty in making online purchases. Meanwhile, according to Firdayanti (2012), perceived risk is a way for consumers to perceive possible losses that will be obtained from their decisions due to the uncertainty of the things that are decided.

1.3 E-commerce

E-commerce according to Wong (2010) is the buying, selling and marketing of goods or services through an electronic system which includes the transfer of funds, exchange and data collection, all arranged in an automated system. Meanwhile, Kozinets et al (2010) define it as the process of buying, selling, exchanging products or services and information through computer networks with internet media. Because of its usefulness and practicality, global audiences recognize the new concept of a business activity, namely online. One of the advantages of using the internet to connect with customers is the fast transmission of data and information between the people involved.

According to article 1 paragraph (2) of Law Number 11 of 2008 concerning Information and Electronic Transactions (UU ITE), electronic transactions are legal acts carried out using computers, computer networks, and/or other electronic media. The definition of electronic transaction or hereinafter referred to as e-commerce is the purchase, sale and marketing of goods and services through electronic systems such as television, radio and computer networks or the internet.

There are three different parts to e-commerce, the first is vendors, namely organizations or people who sell goods or services electronically, they are called electronic vendors or e-vendors. While the second is consumers, namely people who use electronic services to find information, order services or buy products. And third is technology in the form of hardware (computers, internet, cellular phones, and the like) and software (software) that can be used for transactions (Cowles et al. 2002).

1.4 E-commerce business model in Indonesia

E-commerce business model in Indonesia by Lukman in Putra (2020) :

- a. Classifieds
e-commerce companies are only a medium that brings together sellers and buyers in one place. Ex: OLX, Carmudi etc
- b. Marketplace
e-commerce companies provide a platform to promote general product and facilitate all transactions. Ex: Shopee, Tokopedia, Bukalapak etc
- c. Shopping mall

e-commerce companies provide a platform to promote reputable or branded product and facilitate all transactions. Ex: Blibli, Lazada, Zalora etc

- d. Online Shop (website)
This business sells the company's own products through the website. Ex: Traveloka, Adidas, Uniqlo etc
- e. Social Media
social media-based business that is used directly by stakeholders, both companies and individuals. Ex: user of whatsapp, instagram, facebook etc.

1.5 Research Gap

In this study there are 6 hypotheses, including :

- a. perceived ease of use has a positive effect on perceived usefulness. the corresponding research is Al Somali et al (2008), Rahmatsyah (2011), Cho YC et al (2015), Galib et al (2018), and Putra (2020). while those that are not in line are Aghdaie (2011).
- b. perceived usefulness has a positive effect on attitude toward use. the corresponding research Al Somali et al (2008), Rahmatsyah (2011), Adhiputra (2015) and Putra (2020). while those that are not in line are Aghdaie (2011).
- c. perceived ease of use has a positive effect on attitude toward use. the corresponding research is Al Somali et al (2008), Rahmatsyah (2011), Sartika & Baridwan (2012), Juniwati (2014), Adhiputra (2015) and Putra (2020). while those that are not in line are Galib et al (2018).
- d. perceived usefulness has a positive effect on intention to transact. the corresponding research is Sin et al (2012), Hardanti & Sarswati (2013), Anggraeni (2015), Cho YC et al (2015) and Putra (2020). while those that are not in line are Aghdaie (2011), Juniwati (2014) and Galib et al (2018).
- e. attitude toward use has a positive effect on intention to transact. the corresponding research is Devi Juwaheer (2012), Kurniawan et al (2013), Juniwati (2014), Geo et al (2017) and Putra (2020). while those that are not in line are Hardanti & Sarswati (2013).
- f. perceived risk has a positive effect on intention to transact. the corresponding research is Ganguly et al (2009), Crespo & Bosque (2009), Leeraphong & Mardjo (2013), Masoud (2013) and Juniwati (2014). while those that are not in line are Gurung (2016), Rahayu (2012) and Putra (2020).

2. RESEARCH METHOD

The type of research method chosen is descriptive and comparative quantitative. The type of data in this study is subject data and the source uses primary data. The object of this research is students in Jember who are followers of the "mahasiswajember" Instagram account. As for the time of the research itself, it was carried out in January 2020 and was carried out simultaneously for the marketplace model or social media. The data collection method in this study used a survey method in the form of an online questionnaire by providing or distributing a list of written questions via <http://docs.google.com> which was distributed on the "mahasiswajember" Instagram account.

The population in this study were students in Jember who followed the "studentjember" Instagram account. The method used is non-probability with the sampling technique is purposive sampling by making students in Jember who follow the Instagram account "mahasiswajember" and have made e-commerce transactions according to the model as an indicator. Determination of sample size according to Ferdinand (2002) that the sample size depends on the number of indicators used, namely a number of latent variables. The number of samples is equal to the number of indicators multiplied by 5 to 10. In this study, there were 14 indicators multiplied by 5, namely 70 samples on the marketplace and social media so that the total sample was 140 samples.

The measurement scale used is the Likert scale. The data analysis method in this study is Structural Equation Modeling or commonly called SEM and uses the PLS (Partial Least Squares) approach using the Smart PLS application.

Definition of Operational Variables in this study are as follows:

3.1 perceived ease of use, Venkatesh and Davis (2000):

- a. Easy to understand, the indicators used to assess whether the e-commerce model is easy to understand.
- b. Easy to learn, an indicator used to assess whether an e-commerce model is easy to learn.
- c. Easy to operate, an indicator used to assess whether e-commerce is easy to operate.

3.2 perceived ease of use, Venkatesh and Davis (2000):

- a. Increase Effectiveness, indicators used to assess the effectiveness of individuals on the use of e-commerce.
- b. Increase productivity, an indicator used to assess individual productivity on the use of e-commerce.
- c. Usability, an indicator used to assess the individual's usefulness of using e-commerce.

3.3 Attitude toward use, Taylor and Todd (1995):

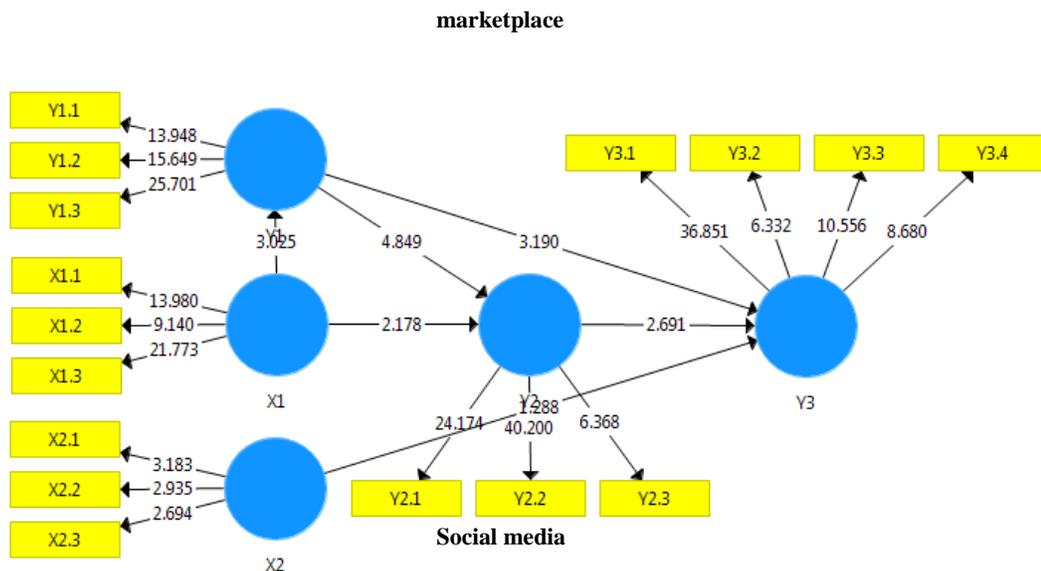
- a. A good idea, an indicator used to judge whether an e-commerce model is a good idea.
- b. Fun thing, an indicator used to assess whether an e-commerce model is a fun thing.
- c. Interesting, an indicator used to assess whether the e-commerce model is more attractive.

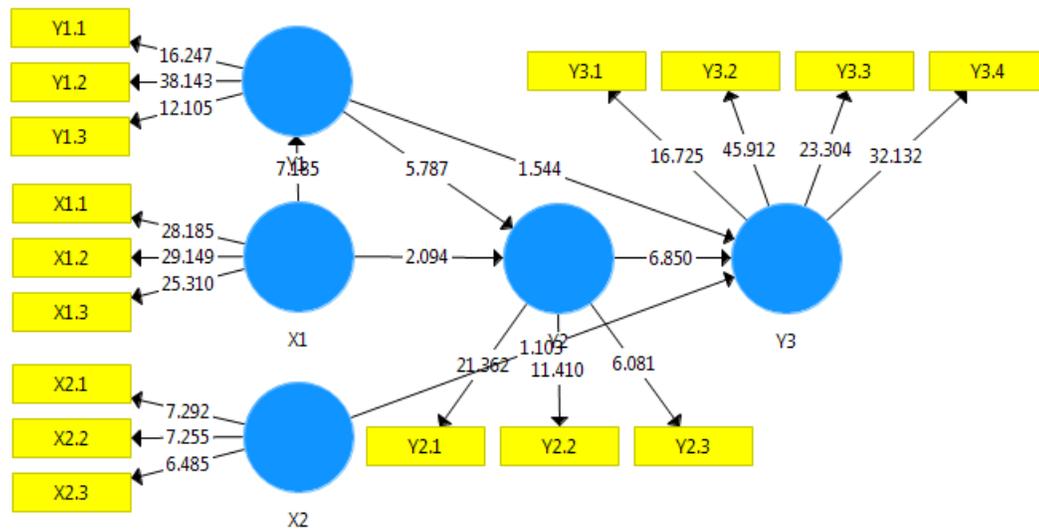
3.4 Intention to transact, Ferdinand (2002):

- a. Transactional interest, an indicator used to assess individual interest in transacting using e-commerce.
- b. Referential interest, an indicator used to assess an individual's interest in referring the use of e-commerce to others.
- c. Preferential interest, an indicator used to assess individual interest in continuing to use an e-commerce model.
- d. Exploratory interest, an indicator used to assess individual interest in seeking further information on the use of e-commerce models.

4. RESULT

- a. Perceived ease of use has an influence on perceived usefulness on Marketplace and Social Media.
- b. Perceived usefulness has an influence on attitude toward use on Marketplace and Social Media.
- c. Perceived ease of use has an influence on attitude toward use on Marketplace and Social Media.
- d. Perceived usefulness has an influence on intention to transact on Marketplace and Social Media.
- e. Attitude toward use has an influence on intention to transact on Marketplace and Social Media.
- f. Perceived Risk has no influence on intention to transact on Marketplace and Social Media.





5. CONCLUSION

All hypotheses are accepted except for the negative effect of perceived risk on intention to transact because respondents tend to ignore risks in transactions using the marketplace and social media. The ease and usability dominate respondents to transact using the marketplace and social media.

6. References

- Adhiputra, M. W. (2015). Aplikasi Technology Acceptance Model Terhadap Pengguna Layanan Internet Banking. *Jurnal Bisnis dan Komunikasi*. ISSN, 2356-4385.
- Aghdaie, S. F. A., Piraman, A., & Fathi, S. (2011). An analysis of factors affecting the consumer's attitude of trust and their impact on internet purchasing behavior. *International Journal of Business and Social Science*, 2(23).
- Anggraeni, R. (2015). Pengaruh Persepsi Kemudahan Penggunaan Dan Persepsi Kegunaan Terhadap Niat Untuk Menggunakan Dan Penggunaan Aktual Layanan Jejaring Sosial Berbasis Lokasi (Studi pada Mahasiswa Fakultas Ekonomi dan Bisnis Universitas Brawijaya Malang). *Ekonomi Bisnis*, 20(1).
- Al-Somali, S. A., Gholami, R., & Clegg, B. (2009). An investigation into the acceptance of online banking in Saudi Arabia. *Technovation*, 29(2), 130-141.
- Asosiasi Penyelenggara Jasa Internet Indonesia (APJII). (2016). *Profil Pengguna Internet Indonesia*. Jakarta: Asosiasi Penyelenggara Jasa Internet Indonesia.
- Asosiasi Penyelenggara Jasa Internet Indonesia (APJII). (2017). *Profil Pengguna Internet Indonesia*. Jakarta: Asosiasi Penyelenggara Jasa Internet Indonesia.
- Asosiasi Penyelenggara Jasa Internet Indonesia (APJII). (2018). *Profil Pengguna Internet Indonesia*. Jakarta: Asosiasi Penyelenggara Jasa Internet Indonesia.
- Cho, Y. C., & Sagynov, E. (2015). Exploring factors that affect usefulness, ease of use, trust, and purchase intention in the online environment. *International Journal of Management & Information Systems (IJMIS)*, 19(1), 21-36.
- Crespo, A. H., & Del Bosque, I. R. (2010). The influence of the commercial features of the Internet on the adoption of e-commerce by consumers. *Electronic Commerce Research and Applications*, 9(6), 562-575.
- Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS quarterly*, 319-340.

- Devi Juwaheer, T., Pudaruth, S., & Monique Emmanuelle Noyaux, M. (2012). Analysing the impact of green marketing strategies on consumer purchasing patterns in Mauritius. *World Journal of Entrepreneurship, Management and Sustainable Development*, 8(1), 36-59.
- Ganguly, B., Dash, S. B., & Cyr, D. (2009). Website characteristics, Trust and purchase intention in online stores:-An Empirical study in the Indian context. *Journal of Information Science & Technology*, 6(2).
- Galib, M. H., Hammou, K. A., & Steiger, J. (2018). Predicting Consumer Behavior: An Extension of Technology Acceptance Model. *International Journal of Marketing Studies*, 10(3).
- Glavee-Geo, R., Shaikh, A. A., & Karjaluto, H. (2017). Mobile banking services adoption in Pakistan: are there gender differences?. *International Journal of Bank Marketing*, 35(7), 1090-1114.
- Gurung, A. (2006). A survey of information technologies in logistics management. *Unpublished survey paper on information Technology, University of Texas at Arlington, USA*.
- Hardanti, K. N., & Saraswati, E. (2013). Faktor Minat Perilaku Menggunakan Sistem informasi Akuntansi Berbasis E-commerce. *Simposium Nasional Akuntansi XVI*.
- Putra, I. C. A., Kustono, A. S., & Miqdad, M. (2019). Comparison of Intention to Transact Use E-Commerce Reviewed from Perceived Usefulness, Perceived Ease of Use, Perceived Risk and Attitude Toward Use. *International Journal of Zambrut*
- Juniwati, J. (2014). Influence of perceived usefulness, ease of use, risk on attitude and intention to shop online. *European Journal of Business and Management*, 6(27), 218-229.
- Kim, D. J., Ferrin, D. L., & Rao, H. R. (2008). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. *Decision support systems*, 44(2), 544-564.
- Kurniawan, D. (2013). Analisis Penerimaan Nasabah terhadap Layanan Mobile Banking dengan Menggunakan Pendekatan Technology Acceptance Model dan Theory of Reasoned Action. *Jurnal Strategi Pemasaran*, 1(1).
- Leeraphong, A., & Mardjo, A. (2013). Trust and risk in purchase intention through online social network: a focus group study of Facebook in Thailand. *Journal of Economics, Business and Management*, 1(4), 314-318.
- Lukman, E. (5). model bisnis e-commerce di Indonesia. *Tersedia: <https://id.technasia.com/5-model-bisnis-ecommerce-di-indonesia> [1 Februari 2016]*.
- Masoud, E. Y. (2013). The effect of perceived risk on online shopping in Jordan. *European Journal of Business and Management*, 5(6), 76-87.
- PDDIKTI. <https://forlap.ristekdikti.go.id/perguruantinggi/> [1 Agustus 2019].
- Rahayu, D., & Yuliasutik, R. (2012). Pengaruh Trust Terhadap Risk Perception, Attitude Toward Online Shopping dan Intention To Shop Online Pada Toko Busana Online Di Surabaya. *Jurnal Akuntansi, Manajemen Bisnis dan Sektor Publik (JAMBSP)*, 8(2), 236-260.
- Rahmatsyah, D. (2011). Analisa faktor-faktor yang mempengaruhi minat penggunaan produk baru (Studi kasus: uang elektronik kartu flazz BCA). Jakarta. *Fakultas Ekonomi Universitas Indonesia, Depok*.
- Sartika, T., & Baridwan, Z. (2013). Pengaruh Kepercayaan, Persepsi Kegunaan, Persepsi Kemudahan, dan Persepsi Kenyamanan Terhadap Minat Penggunaan Sistem Internet Banking. *Jurnal Universitas Brawijaya Malang*.
- Sin, S. S., Nor, K. M., & Al-Agaga, A. M. (2012). Factors Affecting Malaysian young consumers' online purchase intention in social media websites. *Procedia-Social and Behavioral Sciences*, 40, 326-333.
- Wong, J. (2013). *Internet marketing for beginners*. Elex Media Komputindo